American Society for Testing Materials BULLETIN

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October, 1933

ENGINEERS' CLUB BUILDING
1315 SPRUCE ST., PHILADELPHIA

American Society for Testing Materials

BULLETIN

ENGINEERS' CLUB BUILDING 1315 SPRUCE STREET PHILADELPHIA, PA.

NUMBER 64 OCTOBER 31, 1933

Society to Have New Headquarters

Ample Offices in Conveniently Located Building Are Leased

THE Society headquarters, which for the past fourteen years have been in the Philadelphia Engineers' Club Building, will be moved at the end of this year to the Atlantic Building, 260 S. Broad St. (N. W. corner, Broad and Spruce Sts.), Philadelphia. This decision, reached by the Executive Committee a month ago, is the culmination of studies begun several years ago when, as announced in the 1930 report of the Executive Committee, it became evident that the procuring of more adequate Society rooms in another location would be only a question of time and finances.

Time has made increasingly plain the disadvantages of the present quarters, which not only leave much to be desired in attractiveness and serviceability to members and visitors, but are now inadequate for the staff of sixteen —with no opportunity for expansion or improvement. Several proposed new locations examined a year ago seemed too expensive to be favorably considered under present circumstances. Accordingly, when space in the Atlantic Building, one of the finest in the city, was offered at favorable terms on a five-year lease, and examination revealed that much improved Society rooms could be established and maintained there at a cost within the Society's means, the Executive Committee unanimously decided that the move should be made at the termination of the present lease.

More Floor Space Available

The new rooms comprise about 2600 sq. ft. on the fifth floor of the building, to be devoted to Offices, Reception Room, Members' Lounge and Board Room, and about 850 sq. ft. on the fourth floor for storage of current and back publications and use as shipping and general workroom. Heretofore publications have been kept in a storage building some distance away, which space will now be relinquished. The increase in total floor area is about 40 per cent. General office space is increased nearly 60 per cent and a greatly improved arrangement of private and general offices will result. A larger and more attractive Board Room is planned. Most important, an adequate Reception Room and a Members' Lounge will be provided—facilities that have been sorely lacking in our present location. Furnishings for these rooms will be carefully selected to give an attractive, dignified entrance to the Society rooms and an "atmosphere" appropriate to the headquarters of a national technical society. Greatly improved facilities for meetings of the administrative committees of the Society will be available. While not spacious, the new rooms are excellently suited to the needs of the Society at present and for some little time in the future.

Excellent Facilities at New Location

A further word about the building and its location. Built in 1923, the Atlantic Building ranks among the finest in Philadelphia. It is of fireproof construction throughout, with excellent elevator service. Light and ventilation are good, the new Society rooms being advantageously located in this respect, with southern and western exposures. The building is convenient to railroad stations, hotels and clubs. It is less than a city block from the Engineers' Club, so that the meeting rooms and other facilities of this engineering center will be conveniently available.

The decision to establish new headquarters marks another "milestone" in the Society's history, and we believe constitutes a very definite step forward. No little courage was needed to make this decision in the face of present industrial conditions, although so nearly as it is humanly possible to forecast the future it appears that the decision is financially a wise one. The members will recall that several years ago the Executive Committee established from current surpluses a Headquarters' Fund to meet various expenses incident to the establishment of new quarters, such as moving expenses and new furnishings required. There is no thought of elaborate, costly furnishings for any of the rooms. It is desired, however, to suitably furnish the Reception Room, Members' Lounge and Board Room in good taste, and to make them attractive and useful to all who visit us, and President Lawson has appointed a committee, consisting of G. H. Clamer, T. G. Delbridge, C. N. Forrest, W. H. Fulweiler and G. H. Woodroffe, to advise with the Secretary-Treasurer in these matters. We are confident that the plans will commend themselves to the entire membership and that we shall have their support in making the new Society rooms reflect in every way the pride that we all very properly take in the A.S.T.M.

Not a Final Solution

We do not consider, however, that this move is necessarily a "final solution" of the headquarters problem. Some may feel that a commercial office building, no matter how excellent, is not logically a suitable home for a national technical body. We are, however, definitely improving the Society rooms for five years—a short time in the history of an organization—under favorable terms financially, and shall continue to study the problem from many sides that have been considered in the past.

1934 Regional Meeting in Washington, Wednesday, March 7

The 1934 Regional Meeting of the Society will be held in Washington on Wednesday, March 7. The hotel at which this meeting and the 1934 Group Meetings of Committees will be held has not yet been chosen. The last meeting of the Society held in Washington was the Group Meetings of Committees in March, 1928.

A Symposium on Corrosion will feature the Regional Meeting to be sponsored by A.S.T.M. Committees A-5 on Corrosion of Iron and Steel and B-3 on Corrosion of Non-Ferrous Metals and Alloys. This subject, with its many ramifications, is a most important one, and with the long experience of the sponsoring committees as a basis for planning, it is expected this technical feature will be interesting and extremely valuable.

The Group Meetings of A.S.T.M. Committees will begin on Monday, March 5, extending through Friday, March 9. A number of committees have decided to hold their spring meetings as a part of these group meetings. Committee officers will soon be given detailed information on plans for this series of meetings.

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1934 Annual Meeting Will be Held in Atlantic City, June 25-29

The annual meeting of the Society in 1934 will be held at Chalfonte-Haddon Hall, Atlantic City, from Monday, June 25 through Friday, June 29. The excellent facilities for meetings of the A.S.T.M. type which have been offered during past meetings there will again be available. The Executive Committee has secured from the hotel management definite assurance of room rates which compare very favorably with those of other years. Several subjects of much current interest are under consideration for inclusion in the technical program. It is quite probable that Committee B-7 on Light Metals and Alloys will sponsor the presentation of authentic data on the physical properties, service characteristics, corrosion-resistant properties, etc., of the several metals and alloys in the class of light metals. Symposiums on subgrade materials, on new die-casting alloys and on saturant varnishes have been proposed.

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Committee on Dudley Medal Appointed

The Executive Committee has appointed the following Committee on Award of the Charles B. Dudley Medal:

F. E. Schmitt, *Chairman*, Editor, *Engineering-News Record*
H. F. Clemmer, Engineer of Tests, Dept. of Highways, District of Columbia
C. H. Mathewson, Professor of Metallurgy, Sheffield Scientific School, Yale University

This committee will review the eligible technical papers presented at the 1933 annual meeting in Chicago and will select that paper of outstanding merit which constitutes an original contribution on research in engineering materials. The Dudley Medal was established in 1925 by voluntary subscriptions from the members as a means of stimulating research, recognizing outstanding contributions to the *Proceedings* and at the same time commemorating the name of its first president.

New Tentative Standards Approved

At the recent meeting of Committee E-10 on Standards several of the standing committees submitted new and revised tentative standards, and tentative revisions of standards. All of the proposals were accepted, Committee E-10 giving its approval to the publication of tentative revisions of standards in accordance with the authority recently given it by the latest revision of the By-laws. The list of new and revised tentative specifications and test methods and tentative revisions of standards follows. The standing committees in charge of the various items are given in italics following the title.

NEW TENTATIVE STANDARDS

Tentative Specifications for:
Carbon-Steel Castings for Industrial, Railroad and Marine Uses (A 154 – 33 T) (*A-1 on Steel*)
Magnesium Ingot and Stick for Remelting (B 92 – 33 T) (*B-7 on Light Metals and Alloys*)

Tentative Methods of:
Testing Rubber Belting Used for Power Transmission (D 378 – 33 T) (*D-11 on Rubber Products*)
Test for Rubber Hose—Braided Construction (D 379 – 33 T) (*D-11 on Rubber Products*)
Test for Rubber Hose—Wrapped Construction (D 380 – 33 T) (*D-11 on Rubber Products*)
Impact Testing of Metallic Materials (E 23 – 33 T) (*E-1 on Methods of Testing*)

REVISIONS IN EXISTING TENTATIVE STANDARDS

Tentative Specifications for:
Aluminum-Alloy (Duralumin) Bars, Rods and Shapes (Aluminum-Copper-Magnesium-Manganese) (B 89 – 33 T) (*B-7 on Light Metals and Alloys*)
Clay Sewer Pipe (C 13 – 33 T) (*C-4 on Clay Pipe*)
Load-Bearing Concrete Masonry Units (C 90 – 33 T) (*C-10 on Hollow Masonry Building Units*)
Insulated Wire and Cable: 30 per cent Hevea Rubber (D 27 – 33 T) (*D-11 on Rubber Products*)
Insulated Wire and Cable: Performance Rubber Compound (D 353 – 33 T) (*D-11 on Rubber Products*)

Tentative Methods of:
Sampling Coke for Analysis (D 346 – 33 T) (*D-5 on Coal and Coke*)
Rockwell Hardness Testing of Metallic Materials (E 18 – 33 T) (*E-1 on Methods of Testing*)
Chemical Analysis of Aluminum and Light Aluminum Alloys (B 40 – 33 T) (*B-2 on Non-Ferrous Metals and Alloys*)

TENTATIVE REVISIONS OF STANDARD SPECIFICATIONS AND METHODS

Standard Specifications for:
Aluminum Sheet (B 25 – 29)
Aluminum-Base Alloy Sand Castings (B 26 – 31)
Aluminum-Base Sand-Casting Alloys in Ingot Form (B 58 – 31)
Aluminum-Alloy (Duralumin) Sheet (B 78 – 31)
Aluminum-Manganese Alloy Sheet (B 79 – 31)
(Revisions in these five standards were recommended by *Committee B-7 on Light Metals and Alloys*)

Standard Methods of:
Test for Size of Anthracite (D 310 – 31) (*D-5 on Coal and Coke*)
Chemical Analysis of Brass Ingots and Sand Castings (B 45 – 27) (*B-2 on Non-Ferrous Metals and Alloys*)

These new tentative standards and revisions will be published in the 1933 *Proceedings* and in the 1933 Book of Tentative Standards and also in separate form.

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Committee for 1934 Marburg Lecture

The committee which will select the Edgar Marburg lecturer for 1934 has been appointed. Under the rules governing the lecture, this group must consist of a member of the Executive Committee, a member of Committee E-9 on Research and a member of Committee E-6 on Papers and Publications. The personnel, representing the respective committees in the order named, is as follows: Cloyd M. Chapman, *Chairman*, Consulting Engineer; H. E. Smith, Materials Engineer; and J. B. Rather, In Charge, General Laboratories, Socony-Vacuum Corp.

New A.S.T.M. Specifications and Methods Covering Construction Materials

A number of the newly adopted A.S.T.M. standards and recently approved tentative specifications and test methods cover materials which are widely used in engineering structures, buildings, roads and the like. The list given below is intended to bring to the attention of building code officials, engineers and contractors, architects and designers, purchasing agents and all interested in construction, notice of the final adoption or approval as tentative of standards that from their mode of preparation are considered to be authoritative and practical—quality standards—quality in the sense of fairness and adequateness. A.S.T.M. specifications are being referred to in greater numbers in construction projects, in new and revised building codes, and of course in the purchase and sale of the materials covered.

STANDARD SPECIFICATIONS AND TEST METHODS ADOPTED IN 1933

(Each of these items was previously published as tentative)

Steel Plates of Flange and Firebox Qualities for Forge Welding: A 89 – 33.
Steel Suitable for Fusion Welding, List of Specifications for: A 151 – 33.
Structural Rivet Steel: A 141 – 33.
Structural Steel for Ships: A 131 – 33.
Track Spikes, Soft Steel: A 65 – 33.
Fence Fabric, Chain-Link, Zinc-Coated Iron or Steel, Galvanized After Weaving: A 117 – 33.
Line Wire, Telephone and Telegraph, Zinc-Coated (Galvanized) Iron or Steel: A 111 – 33.
Tie Wires, Zinc-Coated (Galvanized) Iron or Steel: A 112 – 33.
Wire Strand (Cable), Zinc-Coated (Galvanized) Iron or Steel: A 122 – 33.
Tube, Copper Water: B 88 – 33.
Gypsum and Gypsum Products, Testing of: C 26 – 33.
Fire Tests of Building Construction and Materials: C 19 – 33.
Linseed Oil, Raw: D 234 – 28.
Putty for Glazing, Pure Linseed Oil: D 317 – 33.
Shellac, Dry Bleached: D 207 – 33.
Shellac, Orange: D 237 – 33.
Tung Oil, Raw: D 12 – 33.
Specific Gravity, 38/15.5 C. of Creosote Fractions, Test for: D 369 – 33.
Volume and Specific Gravity Correction Tables for Creosote, Creosote Coal-Tar Solution (up to 50 per cent Tar) and Coal Tar (Coke-Oven Tars): D 347 – 33.
Timber Preservatives, Terms Relating to: D 324 – 33.

NEW TENTATIVE SPECIFICATIONS AND TEST METHODS

(Approved for publication as tentative standards this year)

Alloy-Steel Castings for Structural Purposes: A 148 – 33 T.
Rivets and Rivet Rounds, Wrought-Iron: A 152 – 33 T.
Zinc Coating (Hot-Dip) on Hardware and Fastenings: A 153 – 33 T.
Floor Tile, Structural Clay: C 57 – 33 T.
Structural Clay Tile, Terms Relating to: C 43 – 33 T.
Wall Tile, Structural Clay Load-Bearing: C 34 – 33 T.
Tile, Structural Clay Non-Load-Bearing: C 56 – 33 T.
Absorption by Aggregates for Concrete (Laboratory Determinations), Test for: C 95 – 33 T.
Absorption of Mixing Water by Aggregates for Concrete, Field Test for: C 96 – 33 T.
Concrete for Pavements: D 366 – 33 T.
Concrete, Ready Mixed: C 94 – 33 T.
Shellac Varnish: D 359 – 33 T.
Shellac Varnish, Centrifuged: D 360 – 33 T.
Turpentine, Spirits of: D 13 – 33 T.
Asphalt Cap Sheet Surfaced with Mineral Granules: D 371 – 33 T.

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Death of J. H. Gibboney

As this BULLETIN goes to press, word has been received of the death of J. H. Gibboney, Chief Chemist, Norfolk & Western Railway Co. Mr. Gibboney was Past-President of the Society, former member of the Executive Committee, Chairman of Committee A-5 on Corrosion of Iron and Steel since 1922, and deeply interested in many Society activities. In his death the Society suffers a severe loss. Details of his life and Society work will appear in the December BULLETIN.

Committee on Membership Plans Work

THE Special Committee on Membership formed by the Executive Committee to direct membership work recently held an interesting meeting at Society Headquarters. The outcome of the meeting was a definite series of activities to be instituted as soon as possible.

The committee, as announced in the July BULLETIN, has been given the responsibility of again bringing the total number of members to the peak reached in 1930 and by long-time planning to assure a steady growth. In planning the work, the committee has very definitely and rightly assumed that if A.S.T.M. is to grow and its activities, which are affected by the membership growth, are to be stimulated, plans must be evolved not only for the immediate future, but also to "keep the ball rolling."

Central Theme

The committee fully realizes that to get best results it must multiply itself as much as possible by enlisting the sustained help of each member of the Society. Careful analysis of new memberships during the past two years points directly to the most effective means of stimulating Society growth—*personal effort on the part of the A.S.T.M. members.*

The complexity of A.S.T.M. work is such that letters, no matter how carefully phrased, and printed material do not adequately bring out all the multitudinous phases of Society activities. They help—but *personal effort* is the thing that really puts the idea across.

With this as a basic element, the membership committee headed by K. B. Cook, consisting of Arthur W. Carpenter, H. G. Farmer, H. M. Hancock, Inge Lyse and H. S. Vassar have started to work on the following activities:

Outline of Membership Activities

1. *Former members,* who through curtailed appropriations, loss in income, and for other reasons have been forced to sever their affiliations with A.S.T.M., are again to be contacted and impressed with the idea that present members "expect you back." It is logical to assume considerable interest on the part of a goodly portion of this group. Improved industrial conditions will aid greatly. Meanwhile, many may be now ready to again renew their affiliations.

2. *A special appeal* is now being made to past officers of the Society and its committees and committee members who are extremely active to fill their quota of one new member each as soon as possible.

3. *Special membership groups,* consisting of fifteen to twenty A.S.T.M. members, are to be organized in leading industrial centers. These groups are to select prospective members and keep in touch with these prospects once they have received an invitation to join the Society from the membership committee.

4, 5, 6. Definite activities are planned to stimulate A.S.T.M. membership of college and university faculty members, purchasing agents, and to organize standing committees to extend the A.S.T.M. representation among companies and individuals who are especially interested in the work of the respective groups.

Every member of the Society is urged to be "member conscious" and to do his part to stimulate our membership growth. The number of new members enrolled in the past few months is encouraging and it is very significant—for if our work is of interest to this many, it is also worth while to three or four times that number.

AMERICAN SOCIETY FOR TESTING MATERIALS

BULLETIN

Issued Bi-Monthly

Engineers' Club Building, 1315 Spruce St., Philadelphia, Pa.

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Publications in Perspective

WHEN midnight December 31 arrives, a most productive year from the standpoint of A.S.T.M. publications will have been completed. During 1933 the Society will have issued a greater volume of published material than in any year since its organization. This fact by itself carries little significance. Viewed from certain specific standpoints, however, it assumes a good deal of importance.

From the financial standpoint all of our publications are important. In 1932 the A.S.T.M. income from the sale of publications amounted to about 25 per cent of the total. This year it will represent a larger proportion, due in part to the fact that this is the year when the Book of Standards is issued. The income derived from publications is very essential and when applied to furthering A.S.T.M. activities is a vital factor.

We like to consider our publications, however, in another light. Are they in step with the conception of A.S.T.M. as being a service society? Are they widely used and do they fill a distinct need for the individual, the company and industry in general?

Increasing sales of nearly all Society publications is evidence that their use is becoming more widespread. They represent information for which engineers and technical men have felt a need and which they have made a concerted effort to supply. Results of research investigations are presented—work for which industry contributes large sums yearly. The standard specifications and methods of testing which they contain are used in the purchase and sales agreements for millions of dollars' worth of materials yearly. Some of the publications represent the work of committees which have spent much time and energy in correlating from widely scattered sources authoritative and critical information on specific subjects. Reviewed from these angles, A.S.T.M. publications are rendering important service.

The outstanding A.S.T.M. book of the year is the 1933 issue of the Book of Standards, described on page 7. It is one of the most widely used books in industry. Other publications filling distinct needs are the volumes containing selected groups of standards, such as the newly issued publication, A.S.T.M. STANDARDS on PRESERVATIVE COATINGS. Others in this group which have been issued previously cover petroleum products, electrical insulating materials, textile materials and refractories. Each is widely used in the respective industry.

Possibly many members of the Society do not realize what a widespread demand there is for copies of the individual standard and tentative specifications and methods of test. In a normal year upwards of 30,000 of these in separate pamphlet form are sold. With increasing emphasis being placed on quality standards and the part which they are to play under the NRA codes, this phase of our work promises to grow.

Promotional value accruing from the widespread use of Society publications is of great importance. Despite the increased knowledge of A.S.T.M., there are still thousands of individuals and companies who would derive much benefit from a more intimate knowledge of Society work. Each publication, therefore, must of itself convey a clear conception of the worth of A.S.T.M. and further the realization on the part of industry of the value of even more widespread participation in the Society's work.

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President Notes Progress Toward Objectives

Work on Headquarters, Membership and Research Fund Pushed

THE announcement of the change in the headquarters in another column in this issue marks a most important step in the progress of our Society, and will be a pleasant surprise to those of our members who have been familiar with the inadequacy and unattractiveness of the old quarters. Not only will the new home give an adequate and convenient place for the work of the staff, but provision will also be made for a reception room for our members and guests who have occasion to visit us. It is hoped that many will come and learn first-hand of the excellent work being done by the staff. It is not expected that this will terminate the plan to have quarters of our own or of the creating of a fund towards this purpose. This step marks the attainment of one of the objects that was laid out for the year's work.

In the matter of the increasing of membership and the creation of a research fund which were also mentioned as objects for the year, I am glad to report that the new Membership Committee under the leadership of Mr. K. B. Cook, has made very definite plans for increasing the membership. This committee is hard at work but will be in need of the cooperation of each of our members. When the appeal comes for your assistance, won't you give the committee such help as you can?

A Research Fund Committee is in the process of formation under the leadership of Past-President F. O. Clements. Those of us who know Doctor Clements' interest in this matter, and his energetic way of handling details, will readily predict success in the undertaking.

T R Lawson

President, 1933–1934

All Items on Letter Ballot Adopted

The canvass of the recent Society letter ballot disclosed that all of the items on the ballot were adopted. An amendment to the By-laws extending the scope of Committee E-10 and the adoption as standard of 57 existing tentative standards and revisions in 74 standards thus became official on September 1. On the great majority of items the results showed no negative votes. On certain recommendations, however, there were some conflicting opinions represented on the average by from one to four negative votes. Items on which negative votes were cast are listed below. Details of the vote on any of the items in the ballot will be furnished on request. The number of ballots cast was 452. The difference between the number of ballots and the sum of the affirmative and negative votes for any item represents the number of ballots marked "not voting" on that item:

Items	Affirmative	Negative
REVISIONS OF EXISTING STANDARDS		
Standard Specifications for:		
Structural Steel for Bridges (A 7 – 29)	117	2
Structural Steel for Buildings (A 9 – 29)	121	3
Welded and Seamless Steel Pipe (A 53 – 30)	112	2
Carbon-Steel Castings for Valves, Flanges and Fittings for High-Temperature Service (A 95 – 29)	93	2
Alloy-Steel Bolting Material for High-Temperature Service (A 96 – 31)	99	2
Forged or Rolled Steel Pipe Flanges for High-Temperature Service (A 105 – 28)	98	2
Billet-Steel Concrete Reinforcement Bars (A 15 – 30):		
Revision of Sections 3, 10 and 11 (*a*) and new Section 15	130	3
Revision of Section 13	117	11
Rail-Steel Concrete Reinforcement Bars (A 16 – 14):		
Revision of Sections 2, 6 and 7 (*a*)	123	2
Revision of Section 9	109	12
Cold-Drawn Steel Wire for Concrete Reinforcement (A 82 – 27)	119	2
Copper Plates for Locomotive Fireboxes (B 11 – 18)	43	1
Copper Bars for Locomotive Staybolts (B 12 – 21)	43	1
Seamless Copper Boiler Tubes (B 13 – 18)	47	1
Tolerances and Test Methods for Tire Fabrics Other than Cord Fabrics (D 122 – 30)	33	1
Tolerances and Test Methods for Tire Cord, Woven and on Cones (D 179 – 30)	34	1
Standard Methods of:		
Test for Sulfur in Petroleum Oils Heavier than Illuminating Oil (D 129 – 27)	116	1
Test for Cloud and Pour Points (D 97 – 30)	121	2
Standard Definitions of:		
Terms Relating to Materials for Roads and Pavements (D 8 – 18)	71	4
TENTATIVE STANDARDS TO BE ADOPTED AS STANDARD		
Tentative Specifications for:		
Structural Rivet Steel (A 141 – 32 T)	99	1
Structural Steel for Ships (A 131 – 31 T)	87	1
Lap-Welded and Seamless Steel and Lap-Welded Iron Boiler Tubes (A 83 – 32 T)	95	1
Specifications and Tests for Soluble Nitrocellulose (D 301 – 31 T)	51	3
Specifications and Test Methods for Asbestos Tape for Electrical Purposes (D 315 – 31 T)	39	2
Chafer Tire Fabrics (D 316 – 31 T)	27	2
Enameling Duck for the Tire Industry (D 336 – 31 T)	27	2
Round-Hole Screens for Testing Purposes (E 17 – 31 T)	76	4
Tentative Methods of:		
Sampling and Testing Shellac (D 29 – 29 T)	56	3
Test for Distillation of Crude Petroleum (D 285 – 30 T)	99	4
Test for Dilution of Crankcase Oils (D 322 – 30 T)	105	4
Tension Testing of Metallic Materials (E 8 – 32 T)	94	26

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List of Standards Available

The List of A.S.T.M. Standards and Tentative Standards, as of September 1, has been printed and copies of the pamphlet will be sent without charge on request. The standards and tentative standards are listed according to the materials to which they apply, and the groups are further subdivided under the headings *Specifications*, *Methods of Testing*, and *Definitions*. An alphabetical table of contents has been added to the pamphlet to facilitate its use.

An Invitation to Submit Criticism

During the months of September and October the tentative standards accepted at the annual meeting and at the fall meeting of Committee E-10 on Standards are edited and published. These are given widespread distribution through their use in industry, by sending review copies to journal editors for comment in their publications and in other ways. Members appreciate, of course, that these tentative specifications and test methods are on trial, and comments and criticisms of them are desired by the standing committees before recommending final adoption as standards.

The membership of A.S.T.M. committees, composed of representatives of producing, consuming and general interests, is good assurance that a proposed standard has been given careful consideration by the interests chiefly concerned. The Society and its committees, however, are very desirous that *everyone* interested in a standard shall have an opportunity to participate in its establishment. A.S.T.M. standards are not just standards adopted by A.S.T.M., but standards developed by industry itself, to meet definite needs. It is only by the widespread participation of *all interests* concerned that authoritative standards which are practical and adequate can be established.

Therefore, every member of the Society and any interested non-members are invited and urged to submit any comments or constructive criticism bearing on tentative standards. These comments will be appreciated by the committees concerned. They may be sent to A.S.T.M. Headquarters for forwarding to officers, or directly to the officers of the committees responsible for the respective standards.

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Manual on Presentation of Data Published

The subjects of acquisition, interpretation and presentation of data are assuming greater importance, and cognizance of this was given in arranging programs of recent annual meetings. It will be recalled that a round-table discussion on the subject "Acquisition of Good Data" took place at the 1932 annual meeting, and formal papers were presented at each of the last two annual meetings stressing the rôle of statistical methods in research and testing work. This year the Technical Committee on Presentation of Data has sponsored the publication of a Manual on Presentation of Data. The discussion covers the application of statistical methods to the problems of (1) condensing information contained in a set of observations and (2) presenting the essential information in a concise form more readily interpretable than the organized mass of original data. The manual should be of considerable interest to all research workers and authors of papers and reports. A price of 50 cents per copy has been set.

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Society Appointments

The following Society appointments are announced:

H. C. Mougey, Assistant Technical Director and Chief Chemist, Research Laboratories, General Motors Corp., as the A.S.T.M. representative on the Sectional Committee on Specifications and Methods of Test for Safety Glass.

R. E. Kennedy, Technical Secretary, American Foundrymen's Association, as the American representative on the Study Commission of the International Association for Testing Materials on Cast Iron. This committee is under the chairmanship of Dr. F. Korber of Germany.

1933 Proceedings Being Compiled

Sustained progress is being made on the compilation of the *Proceedings* of the 1933 annual meeting held in Chicago. Issued in two parts, Part I containing committee reports and all the new and revised tentative standards and proposed revisions of standards, Part II, comprising the technical papers with oral and written discussion, the *Proceedings* will aggregate about 2000 pages. By including the discussion of the papers, the various viewpoints are made available, thus tending to present a composite opinion on important topics. Outstanding features this year of Part II of the *Proceedings* are the Edgar Marburg Lecture on "Crystalline Structure in Relation to Failure of Metals—Especially by Fatigue" and the Symposium on Cast Iron. Each of these items will also be available in separate form.

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Forms Prepared for High-Temperature Data

In the new Tentative Methods of Test for Short-Time High-Temperature Tension Tests of Metallic Materials (E 21 – 33 T) and for Long-Time (Creep) Tests (E 22 – 33 T) three forms are recommended for reporting the data. One form for reporting the results of temperature distribution surveys of the furnace applies to both test methods. The other two forms are to be used in reporting data and results of the tests in the respective methods.

The forms, as recommended by the Joint Research Committee on Effect of Temperature on the Properties of Metals, which is responsible for the test methods, are to be printed on letter-size sheets, so designed that the information can conveniently be noted on the sheets using a typewriter. The sheets are to be available in pads containing 25 sheets of a single form only. The cost of a single pad (one form only) is 50 cents, but three pads (any combination of forms) can be purchased for $1.

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1933 Yearbook Issued by Bureau of Standards

The Standards Yearbook for 1933, compiled by the U. S. Bureau of Standards, has recently been issued. This seventh edition contains outlines of the standardization activities and accomplishments of national technical societies and trade associations, as well as of the Bureau of Standards and other federal and governmental agencies. A brief account of the international cooperation in standardization is followed by a summary of the activities of the national associations of the various countries. Special attention is paid to the current programs of American standardizing agencies and their accomplishments with particular reference to the past year. In these outlines are included the methods employed by the various agencies to make their standards and specifications effective throughout industry. Copies can be obtained from Superintendent of Documents, Washington, D. C.

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Committees A-1 and A-10 Form Group

A joint advisory committee has been formed, composed of representatives of Committees A-1 on Steel and A-10 on Iron-Chromium, Iron-Chromium-Nickel and Related Alloys, to consider jurisdictional matters in connection with the preparation of specifications for materials of interest to both committees. The group is as follows:

Representing Committee A-1: H. H. Morgan, A. E. White.
Representing Committee A-5: Jerome Strauss, N. L. Mochel.

Standards Approved by A.S.A.

Eighteen A.S.T.M. standards have been approved recently by the American Standards Association either through the sectional committee or proprietary standards procedures. In the list given below, the standards relating to cement, zinc coatings on structural steel shapes and all those covering petroleum products were approved by sectional committees of which the Society is sponsor. All the other standards listed were approved under the proprietary standards method. The A.S.A. recognizes proprietary standards as those formulated in the first instance and thereafter reviewed entirely under the auspices of sponsor organizations, but which are in fact competent to be approved as national standards.

There are now 71 A.S.T.M. standard and tentative specifications, test methods, etc., that have been approved by the A.S.A. The list of those recently approved follows:

American Standards	Designation A.S.T.M.	A.S.A.
Standard Specifications for:		
Gypsum	C 22 – 25	A49.1 – 1933
Calcined Gypsum	C 23 – 30	A49.2 – 1933
Gypsum Plasters	C 28 – 30	A49.3 – 1933
Gypsum Molding Plaster	C 59 – 30	A49.4 – 1933
Gypsum Pottery Plaster	C 60 – 30	A49.5 – 1933
Zinc (Hot-Galvanized) Coatings on Structural Steel Shapes, Plates and Bars and Their Products	A 123 – 33	G8.1 – 1933
Carbon-Steel and Alloy-Steel Blooms, Billets and Slabs for Forgings	A 17 – 29	G9.1 – 1933
Standard Methods of Test for:		
Sulfur in Petroleum Oils Heavier than Illuminating Oil	D 129 – 33	Z11.13 – 1933
Cloud and Pour Points	D 97 – 33	Z11.5 – 1933
Flash and Fire Points by Means of Open Cup	D 92 – 33	Z11.6 – 1933
Viscosity of Petroleum Products and Lubricants	D 88 – 33	Z11.2 – 1933
Dilution of Crankcase Oils	D 322 – 33	Z11.29 – 1933
Precipitation Number of Lubricating Oils	D 91 – 33	Z11.30 – 1933
Gravity of Petroleum and Petroleum Products by Means of the Hydrometer	D 287 – 33	Z11.31 – 1933
Standard Methods of:		
Routine Analysis of White Pigments	D 34 – 33	K15 – 1933
Routine Analysis of Dry Red Lead	D 49 – 33	K16 – 1933
Laboratory Sampling and Analysis of Coal and Coke	D 271 – 33	K18 – 1933
Sampling and Testing Portland Cement	C 77 – 32	A1.2 – 1933
American Tentative Standard		
Tentative Method of Test for Penetration of Greases and Petrolatum	D 217 – 33 T	Z11.3 – 1933

All A.S.T.M. standards approved by the A.S.A. carry the note "American Standard" with the A.S.A. designation. If other bodies, such as the American Petroleum Institute, American Foundrymen's Association, etc., have given formal approval to standards, this is noted.

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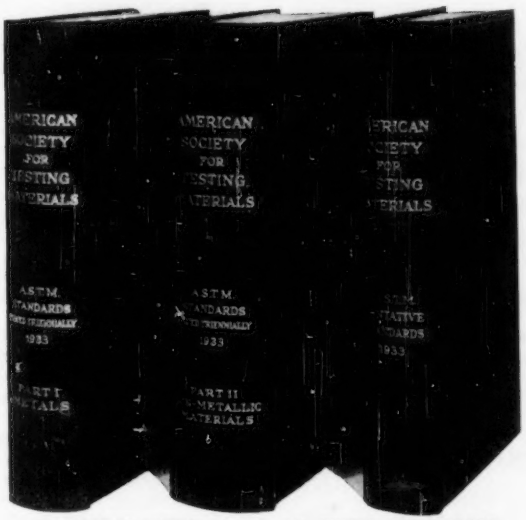
Two Joint Committees Disband

The Joint Committee on Definitions of Terms Relating to Heat Treatment Operations and the Joint Concrete Culvert Pipe Committee have been discharged by action of the sponsoring organizations. The Society was one of the sponsors of each of these two committees. In each case the committees have completed the work assigned. The Culvert Pipe Committee completed the preparation of Standard Specifications for Reinforced Concrete Culvert Pipe and as further revisions of these standards become desirable they will be handled by A.S.T.M. Committee C-13 on Concrete Pipe which was organized in 1932.

1933 Book of A.S.T.M. Standards Will Be Distributed Shortly

The 1933 issue of the Book of A.S.T.M. Standards containing all of the 466 standards is now on press. Copies are expected to be available in November, and members will receive their copies as soon as it is possible to get them in the mails. This triennially published book again consists of two parts. Part I gives all A.S.T.M. standards relating to metals; Part II all those relating to non-metallic materials.

In Part I of the 1933 issue are included the 185 standard specifications, test methods and definitions covering ferrous and non-ferrous metals; Part II has the 283 standards relating to non-metallic materials (cement, lime, gypsum, preservative coatings, petroleum products, rubber, textiles, etc.). Together they aggregate 2300 pages; Part I, 1000 pages; Part II, 1300 pages.



WIDELY USED A.S.T.M. PUBLICATIONS

An Important Publication

The Book of A.S.T.M. Standards is unquestionably one of the most important and widely used publications in the engineering materials field. The standards contained in it are referred to in practically every important building code in this country. Since it is the official source of A.S.T.M. standards, it is a part of the purchase and sales agreements of many millions of dollars worth of materials yearly. A.S.T.M. standards cover by far the greater proportion of structural steel, cement, lime, boiler steel, petroleum products and countless other engineering products sold in this country.

Aside from the practical value and utility of this important book, it is tangible evidence of the immense amount of work devoted to standardization by the standing committees of the Society, and not only every committee, but every member of the Society has contributed definitely to its publication. He should take justifiable pride in its possession. The increased number of standards included in each issue every three years is truly representative of A.S.T.M. standardization progress in which each member has done his share. The Book of Standards not only is representative of an important phase of the Society activities, but it is extremely useful to many of the members and usually their files have "well-thumbed" copies.

Make-up of 1933 Issue Changed

The publication of the Book of Standards every three years, with a supplement issued in each intervening year containing standards adopted for that year, has worked very well. It is recognized that occasional revisions in quality standards for materials are necessary to keep abreast of improvements in manufacturing processes, changes in design and construction and for other reasons. The policy of adopting revisions of standards, principally in a Book of Standards year, has seemed to fill this need.

Several changes will be made in the 1933 issue, aimed to facilitate the use of the book. First of all, the standards are grouped in what seems to be a more logical arrangement than used in previous issues. In Part I, for instance, the ferrous metals will follow this general arrangement—structural and rivet steel; boiler steels; steel for welding; strip steel; reinforcement steel; commercial bar steels; steel rails and accessories; spring steel and springs; etc. Standards covering related materials are grouped. A further classification is observed in that for a particular class of material, the specifications come first followed directly by the methods of testing. In the complete subject index, each standard is indexed under the principal subjects covered by it. Keywords will be given under these subject headings in alphabetical sequence. Standards approved or adopted by other organizations will carry a distinctive note to this effect. It is believed all of these changes will improve the makeup of the book and aid in referring to the standards given.

A comparison of the 1930 issue with the current one is interesting. Whereas the earlier issue contained 427 standards, and aggregated 2100 pages, the 1933 issue has 466 standards, with 2300 pages.

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Book of Tentative Standards

Another A.S.T.M. publication which is widely used throughout industry is the Book of A.S.T.M. Tentative Standards. All of the 221 tentative standards as of September 1, 1933, will be included in the 1933 issue (1000 pages) to be printed shortly. While the official reference to tentative standards is the Society *Proceedings*, for actual use the Book of Tentative Standards is more convenient. The *Proceedings* give new and revised tentative standards accepted for a respective year, while the Book of Tentative Standards contains *all* tentative specifications, test methods, definitions, etc., issued by the Society. The complete subject index and two tables of contents, one listing the items under materials covered, the other list in numeric sequence of the designations, enable any division of the subject matter to be immediately located. New members receive a copy of the current issue and members can purchase copies at special prices.

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Physical and Chemical Examination of Paints, Varnishes, Lacquers and Colors

A laboratory manual entitled *Physical and Chemical Examination of Paints, Varnishes, Lacquers and Colors* has just been issued by Dr. H. A. Gardner, Director, Institute of Paint and Varnish Research, Washington, D. C. The sixth edition is a thoroughly revised one, brought up to date to include all modern methods for physical and chemical testing of raw materials and finished products. A supplement gives the physical properties of over 1000 paint pigments with the chemical composition given in many instances. There is a special supplement containing all specifications and test methods issued by the A.S.T.M. for protective coatings. The book comprises 1500 pages.

New Members to October 18, 1933

The following 41 members were elected from July 20 to October 18, 1933:

Company Members (7)

Callender's Cable and Construction Co., Ltd., J. Bowyer, Works Manager, Anchor Works, Leigh, Lancashire, England.
Chain Belt Co., G. K. Viall, Vice-President, 1600 W. Bruce St., Milwaukee, Wis.
Cities Service Oil Co., J. P. Wright, Plant Superintendent, Milwaukee, Wis.
Metropolitan Water District of Southern California, The, F. E. Weymouth, General Manager and Chief Engineer, 306 W. Third St., Los Angeles, Calif.
Mountsorrel Tarred Macadam Co., Ltd., Fred Rickaby, Manager, Welford House, Welford Place, Leicester, England.
Office National des Combustibles Liquides, Le Directeur, 85 Boulevard Montparnasse, Paris VIe, France.
South Florida Test Service, E. M. DeNoon, Owner, Box 387, Miami, Fla.

Individual and Other Members (31)

Ahlston, A. C., Chief Mechanical Engineer, Victorian Rys., Spencer St., Melbourne, Australia.
Anderson, A. P., Lubrication Technologist, Shell Petroleum Corp., Wood River, Ill.
Boian, W. O., Engineer in Charge of Drafting and Engineering, Pittsburgh-Des Moines Steel Co., 1015 Tuttle St., Des Moines, Iowa.
Burwell, A. W., Technical Director, Alox Chemical Corp., Box 949, Niagara Falls, N. Y.
Cleveland Board of Education, Testing Laboratory, 3034 E. Sixty-third St., Cleveland, Ohio.
Coonley, J. C., Research Engineer, Walworth Co., Greensburg, Pa.
Eddy, Richard, Chief Engineer, Dean Brothers Co., 323 W. Tenth St., Indianapolis, Ind.
Feigel, J. H., Assistant Engineer, Bureau of Engineering, 427 City Hall, Buffalo, N. Y.
Filippi, Hugo, General Superintendent, Illinois Brick Co., 228 N. La Salle St., Chicago, Ill.
Fleischman, L. E., Chemist, 611 Newark St., Hoboken, N. J.
Goss, W. G., Technical Service Division, Kimble Glass Co., Vineland, N. J. For mail: 111 N. Canal St., Chicago, Ill.
Hooper, Richard B., Chemist, Chrysler Corp., Detroit, Mich. For mail: 10210 Second Boulevard.
Johnson, G. E., Superintendent, International Lead Refining Co., 4011 Grand Boulevard, East Chicago, Ind.
Jones, O. L., President and Manager, Illinois Clay Products Co., Joliet, Ill.
Kerlin, W. W., Metallurgist, Technical Dept., Gray Iron Inst., Inc., 4300 Euclid Ave., Cleveland, Ohio.
Kushing, J. W., Research and Testing Engineer, Michigan State Highway Dept., Lansing, Mich.
McMahon, L. H., Manager, Lubricating Oil Dept., Pan American Petroleum and Transport Co., 122 E. 42d St., New York City.
Mississippi State College, Department of Civil Engineering, D. M. McCain, Professor of Civil Engineering, State College, Miss.
Mitchell, H. M., Eastern Representative, H. H. Robertson Co., 475 Fifth Ave., New York City.
Moore, R. L., Technical Director, Marshall Asbestos Corp., Troy, N. Y.
Moran, J. J., Technologist, Kimble Glass Co., Vineland, N. J. For mail: 342 Windemere Ave., Lansdowne, Pa.
Nichols, E. H., Engineer, The Funkhouser Co., 716 Summit Ave., Hagerstown, Md.
Palmer, R. M., Vice-President, Ferro-Nil Corp., 500 Fifth Ave., New York City.
Payton, Lyle, City Engineer, Stockton, Calif.
Pieraccini, Frank, Superintendent, The Tire Fabric Corp., Salmon Falls, N. H.
Rendel, T. B., Engineer in Charge of Motor Lab., Shell Petroleum Corp., Wood River, Ill.
Sherwin, E. B., Secretary, Chicago Hardware Fdy. Co., North Chicago, Ill.
Shive, R. A., Technical Director, The Arco Mfg. Co., 7301 Bessemer Ave., Cleveland, Ohio.
Simon, Jean, Director, Standard Franco Americaine de Raffinage, Raffinerie de Port-Jerome, Boite Postale No. 8, Lillebonne Seine-Inferieure, France.
Superintendent, Government Test House, 30 Judge's Court Road, Alipore, Calcutta, India.
University of Cambridge, Engineering Dept., Cambridge, England.

Junior Members (3)

Fickel, Joe, Materials Inspector, Kansas State Highway Commission, Box 231, Council Grove, Kans.
Morton, H. C., Research Chemist, Russell Mfg. Co., Middletown, Conn.
Trimble, Don, Welding Division, J. D. Adams Mfg. Co., Indianapolis, Ind.

Personals

News items concerning the activities of our members will be welcomed for inclusion in this column.

W. J. MACKENZIE, formerly with the Chicago Division of the Republic Steel Corp., is now Manager of Sales and Metallurgy, Alloy Division, Youngstown Sheet and Tube Co., Chicago.

WILLIAM H. KLEIN of the Pennsylvania-Dixie Corp. has been appointed General Operating Manager of all plants and will make his headquarters at Nazareth, Pa. He was for years general manager of the company's Southern Division.

D. D. MCGUIRE has severed his connection with the Standard Building Materials Co., St. Louis, and is now with the Choctaw Culvert and Machinery Co., Nashville, Tenn.

CHARLES F. SCHMID is now connected with the Cable Engineering Dept., Anaconda Wire and Cable Co., Hastings-on-Hudson, N. Y. He was formerly with The American Brass Co., Waterbury, Conn.

L. B. MANLEY has been appointed Office Engineer for the Delaware River Joint Commission in connection with the construction of a high-speed line between Camden and Philadelphia over the Delaware River Bridge.

E. C. GWALTNEY has severed his connection with Morgan Mills, Laurel Hill, N. C., to take a position with the Bibb Manufacturing Co., Columbus, Ga.

C. E. MCKAY has opened an office at 334 Sutter St., San Francisco, Calif., as a consultant in Industrial X-ray Photography.

GEORGE A. RENARD, Executive Secretary-Treasurer, National Association of Purchasing Agents, was recently awarded the J. Shipman Gold Medal of the Purchasing Agents Association of New York in recognition of outstanding services rendered the purchasing profession.

C. H. HAUPT, Vice-President and Chief Engineer, Standard Oil Development Co., is retiring from active duties after a period of service with the Standard Oil Co. of New Jersey extending over 33 years.

ALBERT MOYER, formerly Sales Manager and Assistant to the President, Vulcanite Portland Cement Co., has been elected President, succeeding the late W. D. Lober.

E. J. RUTAN, Superintendent, Testing Dept., New York Edison Co., was recently elected chairman of the newly organized Sectional Committee on Electrical Measuring Instruments functioning under the American Standards Association.

Necrology

We announce with regret the death of the following:

CLEMENT E. CHASE, Modjeski, Masters and Chase, Philadelphia, Pa. Member since 1914. Mr. Chase, one of the country's foremost bridge engineers was killed as the result of a tragic fall from the Delaware River Bridge, one of the many bridges in which he took a leading part both in design and construction. He took an active interest in the work of Committee A-1 on Steel, particularly Subcommittee II on Structural Steel for Bridges, Buildings and Rolling Stock, and this interest will be greatly missed by his fellow committee members.

HARRY E. HOFMANN, Chemist, Stanco, Inc., Elizabeth, N. J. Member since 1927. Mr. Hofmann was a member of Committee D-1 on Preservative Coatings.

GEORGE A. LUTZ, Electrical Engineer, National Electric Products Corp., Pittsburgh, Pa. Mr. Lutz was a member of Committee A-5 on Corrosion of Iron and Steel.

WLADIMIR D. STAL, Mechanical Engineer, In Charge of Concrete Testing Laboratory, Beauharnois Construction Co., Beauharnois, P. Q., Canada. Member since 1931.

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New Year Book Sent to Members

Members of the Society who have requested a copy of the 1933 Year Book should by now have received their copy. Mailing was completed some time ago. The make-up of this issue of the Year Book was considerably revised over previous issues, and the changes are thought to improve the usefulness of the book.

PROFESSIONAL CARDS

PROFESSIONAL CARDS will be accepted for inclusion on this page from Consulting Engineers, Metallurgists, Chemists, Testing Engineers and Testing Laboratories.

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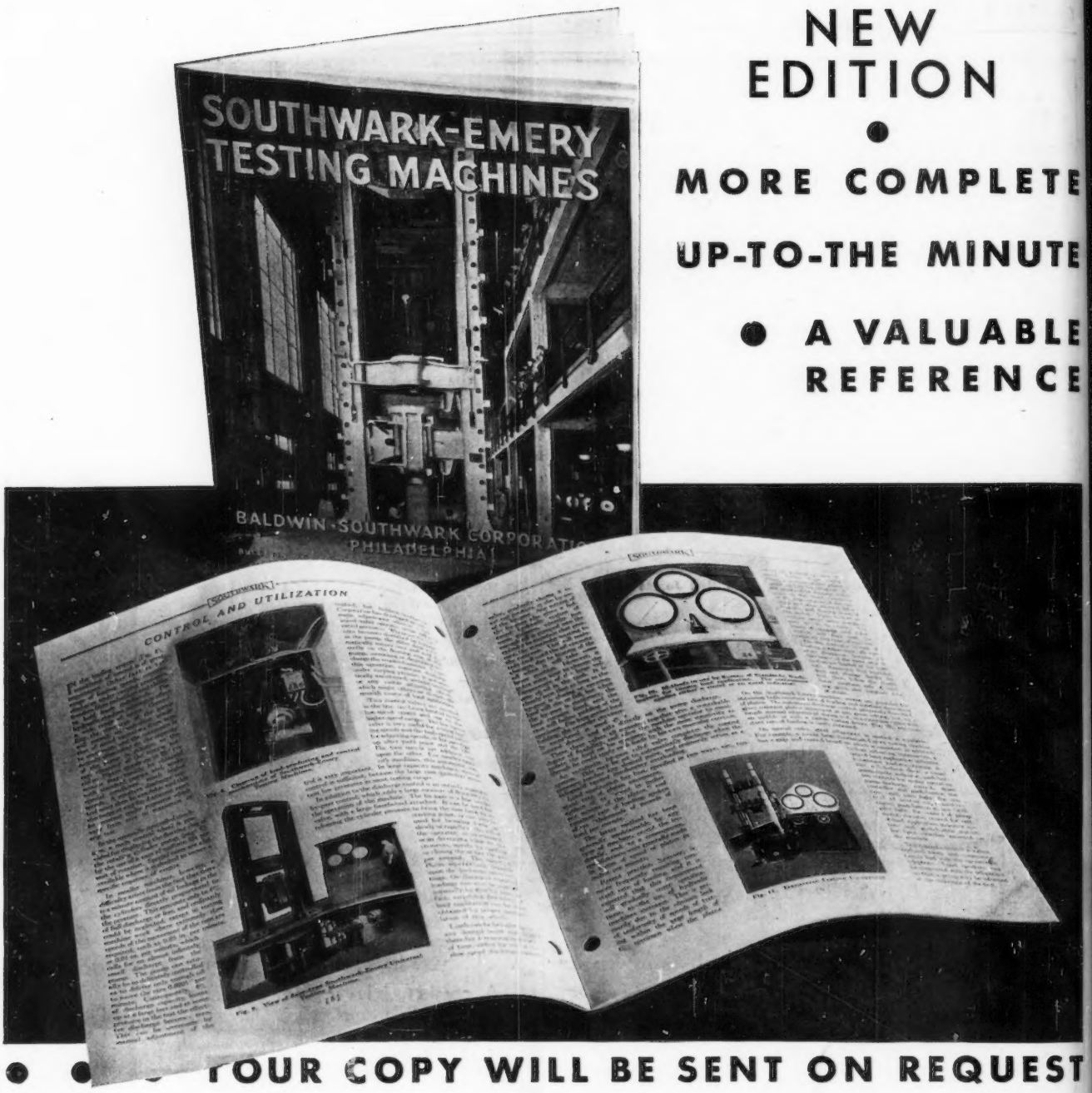

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